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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
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10/719,282

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Koji Tanonaka

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EXAMINER

NAJEE-ULLAH, TARIQ S

ART UNIT

PAPER NUMBER

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PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary	Application No. 10/719,282	Applicant(s) TANONAKA, KOJI	
	Examiner TARIQ S. NAJEE-ULLAH	Art Unit 2453	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 05 October 2009.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-9 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-9 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____ |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08) | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Response to Amendment

1. This Office action has been issued in response to Applicant's Amendment filed October 5, 2009. Claims 1-9 are pending in the case. No claims have been canceled or added. Claims 1 and 4 have been amended.

Response to Arguments

2. Applicant's arguments with respect to claims 4-9 rejected under 35 U.S.C. 101 have been considered but are not found persuasive. Applicant argues that the claimed "node apparatus for connection to a network comprising..." "a receiving unit" and "a synchronous state indication code converting unit" is by definition of the word "apparatus" is a hardware element. Examiner respectfully disagrees. Claim 4 is not limited to tangible embodiments. The claim reciting "node apparatus for connection to a network comprising..." "a receiving unit" and "a synchronous state indication code converting unit" is nonstatutory. "A node apparatus for connection to a network comprising..." "a receiving unit" and "a synchronous state indication code converting unit" is just limited to functional descriptive material consisting of a computer program per se, instead of being defined as including tangible embodiments (i.e., a computer readable storage medium such as memory device, storage medium, processor, etc.). As such, the claim is not limited to statutory subject matter and is therefore nonstatutory. Examiner maintains original rejection. Examiner strongly encourages Applicant to amend this claim by adding a specific hardware element (i.e. processor,

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physical network card, etc.) from the original specification to the body of the claim in order to overcome this rejection.

3. Applicant's arguments with respect to claims 1-9 rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,618,455 to Maeda et al (Maeda hereinafter) in view of in view of US 2004/0208568 to Sweeney et al (Sweeney hereinafter) have been considered but are moot in view of the new ground(s) of rejection.

Priority

4. Should applicant desire to obtain the benefit of foreign priority under 35 U.S.C. 119(a)-(d) prior to declaration of an interference, a certified English translation of the foreign application must be submitted in reply to this action. 37 CFR 41.154(b) and 41.202(e).

Failure to provide a certified translation may result in no benefit being accorded for the non-English application.

Claim Rejections - 35 USC § 101

5. 35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. Claims 4-9 are rejected under 35 U.S.C. 101 because the claimed invention is directed to non-statutory subject matter. Claim 4 recites "a node apparatus conforming to a given one of a first synchronization scheme and a second synchronization scheme...comprising a receiving unit...and a synchronous state indication code converting unit." As presented in the claim language, the apparatus is not limited to any

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statutory hardware elements and is considered software. An apparatus containing software is considered a program per se and is non-statutory. As such claim 4 is directed to non-statutory subject matter. Claims 5-9 are rejected because they depend from claim 4 and as such are considered non-statutory.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

8. Claims 1-9 are rejected under 35 U.S.C. 103(a) as being unpatentable over US Patent 6,618,455 to Maeda et al (Maeda hereinafter) in view of US 2004/0208568 to Sweeney et al (Sweeney hereinafter) and further in view of US 2004/0156325 to Perkins et al (Perkins hereinafter).

Regarding claims 1 and 4, Maeda teaches **a synchronous network establishing method of establishing a synchronous network in which a node apparatus conforming to a first synchronization scheme and a node apparatus conforming to a second synchronization scheme co-reside** (Maeda, col. 1, line 60 – col. 2, line 16). Maeda does not explicitly teach **wherein the first synchronization scheme and the second synchronization scheme implement different synchronous state indication codes for establishing the synchronous network, said method comprising: receiving a first state indication code used by the first**

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synchronization scheme to indicate a state of a clock signal with respect to each of a plurality of clock signals employed in the first synchronization scheme; converting the first synchronous state indication code used by the first synchronization scheme into a second synchronous state indication code used by the second synchronization scheme when the node apparatus conforming to the second synchronization scheme receives the first synchronous state indication code from the node apparatus conforming to the first synchronization scheme, the second synchronous state indication code being used by the second synchronization scheme to indicate a state of a clock signal with respect to each of the plurality of clock signals employed in the second synchronization scheme, wherein the first synchronous state indication code is converted into the second synchronous state indication code such that plural values of the first synchronous state indication code different from each other are assigned to respective values of the second synchronous state indication code different from each other.

Sweeney teaches **wherein the first synchronization scheme and the second synchronization scheme implement different synchronous state indication codes for establishing the synchronous network** (Sweeney, ¶ 27, 43; fig. 2), **said method comprising: receiving a first state indication code used by the first synchronization scheme to indicate a state of a clock signal with respect to each of a plurality of clock signals employed in the first synchronization scheme** (Sweeney, ¶ 27, 43, 62; fig. 2); **converting the first synchronous state indication**

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code used by the first synchronization scheme into a second synchronous state indication code used by the second synchronization (Sweeney, ¶ 27, 43, 62; fig. 2) scheme when the node apparatus conforming to the second synchronization scheme receives the first synchronous state indication code from the node apparatus conforming to the first synchronization scheme (Sweeney, ¶ 27, 43, 62; fig. 2), the second synchronous state indication code being used by the second synchronization scheme to indicate a state of a clock signal (Sweeney, ¶ 27, 43, 62; fig. 2)with respect to each of the plurality of clock signals employed in the second synchronization scheme(Sweeney, ¶ 27, 43, 62; fig. 2) wherein the first synchronous state indication code is converted into the second synchronous state indication code (Sweeney, ¶ 27, 43, 62; fig. 2).

To provide the method of Maeda with additional functionality of converting the SDH to SONET or vice-versa would have been obvious to one of ordinary skill in the art, in view of the teachings of Sweeney, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention.

Maeda-Sweeney fails to explicitly teach such that plural values of the first synchronous state indication code different from each other are assigned to respective values of the second synchronous state indication code different from each other.

Perkins teaches such that plural values of the first synchronous state indication code different from each other are assigned to respective values of the second synchronous state indication code different from each other (Perkins, fig. 3,4,5; ¶ 7, 16, 45). To provide the method of Maeda-Sweeney with additional functionality of mapping the differing SDH to differing SONET codes or vice-versa would have been obvious to one of ordinary skill in the art, in view of the teachings of Perkins, since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions, and the combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention.

Regarding claim 2, Maeda-Sweeney-Perkins discloses the invention substantially as described in claim 1 above including, **further comprising including the first synchronous state indication code that is supplied from the node apparatus conforming to one of the first scheme and the second scheme in an empty bit** (Maeda, fig. 2, col. 5, line 37-56) **of the converted second synchronous state indication code** (Sweeney, ¶ 27, 43; fig. 2).

Regarding claim 3, Maeda-Sweeney-Perkins discloses the invention substantially as described in claim 1 above including, **further comprising using a pre-converted synchronous state indication code included in an empty bit** (Maeda, fig. 2, col. 5, line 37-56) **of the first synchronous state indication code that is supplied from the node apparatus conforming to one of the first scheme and the second scheme** (Sweeney, ¶ 27, 43, 62; fig. 2).

Regarding claim 5, Maeda-Sweeney-Perkins discloses the invention substantially as described in claim 4 above including, **further comprising: a selecting unit to select one of the synchronous state indication code supplied from the counterpart node apparatus** (Maeda, fig. 16, col. 4, line 27-61) **and the converted synchronous state indication code obtained by the synchronous state indication code converting unit** (Sweeney, ¶¶ 27, 43; fig. 2).

Regarding claim 6, Maeda-Sweeney-Perkins discloses the invention substantially as described in claim 5 above including, **wherein the selecting unit administers switching according to a switching instruction signal** (Maeda, clock switching unit, col. 1, line 66 – col. 2, line 35).

Regarding claim 7, Maeda-Sweeney-Perkins discloses the invention substantially as described in claim 5 above including, **further comprising: a switch unit to instruct a switching of the selecting unit** (Maeda, clock switching unit, col. 1, line 66 – col. 2, line 35).

Regarding claim 8, Maeda-Sweeney-Perkins discloses the invention substantially as described in claim 5 above including, **further comprising: a switching instruction unit to detect a bit of a signal supplied from the counterpart node apparatus to determine which of the first scheme and the second scheme said counterpart node apparatus conforms to, and to instruct a switching of the selecting unit based on the determination** (Maeda, clock switching unit, col. 1, line 66 – col. 2, line 61).

Regarding claim 9, Maeda-Sweeney-Perkins discloses the invention substantially

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as described in claim 4 above including, **wherein a content to be converted by the synchronous state indication code converting unit can be arbitrarily changed** (Maeda, clock switching unit, col. 1, line 66 – col. 2, line 61).

Conclusion

9. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: US 7,397,760 and US 2004/0008692 to Bamba.

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to TARIQ S. NAJEE-ULLAH whose telephone number is (571)270-5013. The examiner can normally be reached on Monday through Thursday 8:00 - 6:30 EST.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Joseph Thomas can be reached on (571) 272-6776. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/THUHA T. NGUYEN/
Primary Examiner, Art Unit 2453

January 29, 2010
/T. S. N./
Examiner, Art Unit 2453